CLAIMS

What is claimed is:

1. An apparatus, comprising:

a first segment comprising a first and second ladders and having a differential input;

a second segment coupled to said first segment and having a differential output; and

at least one or more switches coupled between said first and second ladders to switch between said first and second ladders;

wherein a differential digital signal received at the differential input is converted to a differential analog signal at the differential output.

2. An apparatus as claimed in claim 1, wherein said first segment is a least significant bit section.

3. An apparatus as claimed in claim 1, wherein said second segment is a most significant bit section.

4. An apparatus as claimed in claim 1, wherein the first and second ladders comprise R2R ladders.

5. An apparatus as claimed in claim 1, wherein said second segment comprises a 2R pair array.

6. An apparatus as claimed in claim 1, wherein the first ladder is coupled to a current sourcing input buffer, and wherein the second ladder is coupled to a current sinking buffer.

7. An apparatus as claimed in claim 1, further comprising an impedance element to couple said first segment and said second segment.

8. An apparatus as claimed in claim 1, wherein the first and second ladders comprise R2R ladders and said second segment comprises a 2R pair array, said apparatus further comprising a resistor having a nominal value of R to couple said first segment and said second segment.

9. An apparatus as claimed in claim 1, wherein the first and second ladders comprise R2R ladders and said second segment comprises a 2R pair array, and wherein resistors of the first ladder are cross mixed with resistors of the second ladder on an integrated circuit.

10. An apparatus as claimed in claim 1, further comprising a filter coupled to the differential output, wherein said filter has a gain sufficient to not require a buffer between the differential output and the filter.

11. An apparatus, comprising:

a transceiver; and

an omnidirectional antenna coupled to said transceiver;

said transceiver including a digital-to-analog converter comprising:

a first segment comprising a first and second ladders and having a differential input;

a second segment coupled to said first segment and having a differential output; and

at least one or more switches coupled between said first and second ladders to switch between said first and second ladders;

wherein a differential digital signal received at the differential input is converted to a differential analog signal at the differential output.

12. An apparatus as claimed in claim 11, wherein said first segment is a least significant bit section.

13. An apparatus as claimed in claim 11, wherein said second segment is a most significant bit section.

14. An apparatus as claimed in claim 11, wherein the first and second ladders comprise R2R ladders.

15. An apparatus as claimed in claim 11, wherein said second segment comprises a 2R pair array.

16. An apparatus as claimed in claim 11, wherein the first ladder is coupled to a current sourcing input buffer, and wherein the second ladder is coupled to a current sinking buffer.

17. An apparatus as claimed in claim 11, further comprising an impedance element to couple said first segment and said second segment.

18. An apparatus as claimed in claim 11, wherein the first and second ladders comprise R2R ladders and said second segment comprises a 2R pair array, said apparatus further comprising a resistor having a nominal value of R to couple said first segment and said second segment.

19. An apparatus as claimed in claim 11, wherein the first and second ladders comprise R2R ladders and said second segment comprises a 2R pair array, and wherein resistors of the first ladder are cross mixed with resistors of the second ladder on an integrated circuit.

20. An apparatus as claimed in claim 11, further comprising a filter coupled to the differential output, wherein said filter has a gain sufficient to not require a buffer between the differential output and the filter.